



*Commonwealth of Virginia*

***VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY***

PIEDMONT REGIONAL OFFICE  
4949-A Cox Road, Glen Allen, Virginia 23060  
(804) 527-5020 FAX (804) 527-5106  
[www.deq.virginia.gov](http://www.deq.virginia.gov)

Matthew J. Strickler  
Secretary of Natural Resources

David K. Paylor  
Director  
(804) 698-4000

James J. Golden  
Regional Director

February 4, 2020

Mr. Harold S. Thacker  
Director of Operations  
Waste Management Disposal Services of Virginia, Inc.  
Middle Peninsula Landfill and Recycling Facility  
3714 Waste Management Way  
Glenns, VA 23149

Location: Gloucester County  
Registration No: 40920

Dear Mr. Thacker:

Attached is a renewal permit to operate your municipal waste landfill pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution. This permit incorporates provisions from the permit dated August 7, 2017.

The permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all permit conditions carefully.

In evaluating the application and arriving at a final decision to issue this permit, the Department deemed the application complete on December 18, 2019. Solicited written public comments by placing a newspaper advertisement in the Gloucester-Mathews Gazette-Journal newspaper on October 17, 2019. The thirty (30) day comment period (provided for in 9 VAC 5-80-270) expired on November 16, 2019. No comments were received from the public. All comments received in this office from the US EPA were resolved and a detailed account attached to the statement of Basis (SOB).

This approval to operate does not relieve Waste Management Disposal Services of Virginia, Inc. of the responsibility to comply with all other local, state, and federal permit regulations.

To review any federal rules referenced in the attached permit, the US Government Publishing Office maintains the text of these rules at [www.ecfr.gov](http://www.ecfr.gov), Title 40, Part 60 and/or 63.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you. Please consult the relevant regulations for additional requirements for such requests.

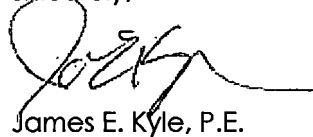
As provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal of this decision by filing a Notice of Appeal with:

David K. Paylor, Director  
Department of Environmental Quality  
P.O. Box 1105  
Richmond, VA 23218-1105

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit, please call 804-527-5020.

Sincerely,



James E. Kyle, P.E.  
Air Permit Manager

JEK/hll/ 40920\_Title\_V\_Cover\_Letter\_ADA\_02042020\_Final

Attachment: Permit

67 FR 36476 (May 23, 2002 – NSPS WWW Clarification)

71 FR 53272 (September 8, 2006 – NSPS WWW/NESHAP AAAA Clarification)

DEQ Forms Link: (<http://www.deq.virginia.gov/Programs/Air/Forms.aspx>)

Air Compliance Forms: ACC, PDR and SAMR Templates

Federal Rules Link ([www.ecfr.gov](http://www.ecfr.gov)):

40 CFR 60 Subpart WWW

40 CFR 63 Subpart AAAA

40 CFR 63 Subpart ZZZZ

40 CFR 60, NSPS Subpart IIII

40 CFR 60, NSPS Subpart JJJJ (for information only)

40 CFR 60 Subpart XXX (for information only)

cc: Director, OAPP (electronic file submission)

Manager, Data Analysis (electronic file submission)

Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III (electronic file submission)

Manager, Air Compliance (electronic file submission)



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Federal Operating Permit  
Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300, of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: Waste Management Disposal Services of Virginia, Inc.  
Facility Name: Middle Peninsula Landfill and Recycling Facility - Gloucester Co.  
Facility Location: US Rt. 17, 0.25 miles south of US Rt. 17/St. Rt. 601 Intersection  
Registration Number: 40920  
Permit Number: PRO-40920

This permit includes the following programs:  
Federally Enforceable Requirements - Clean Air Act (Sections I through VII)  
State Only Enforceable Requirements (Section VIII) (Optional)

February 4, 2020  
Effective Date

February 3, 2025  
Expiration Date

A handwritten signature in cursive script, appearing to read "Kyle Ivar Winter".

Kyle Ivar Winter, P.E.  
Deputy Regional Director

February 4, 2020  
Signature Date

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Permit Conditions, 38 pages



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## Facility Information

### Permittee/Facility Name

Waste Management Disposal Services of Virginia, Inc.  
Middle Peninsula Landfill and Recycling Facility  
3714 Waste Management Way  
Glenns, VA 23149

### Responsible Official

Mr. Harold Thacker  
Director of Operations  
(804) 727-9017

### Contact person

Raymond McGowan  
Environmental Protection Manager  
(804) 792-6011

County-Plant Identification Number: 51-073-00032

Facility Description: NAICS Code: 562212- SIC Code 4593/4911 - The Middle Peninsula Landfill and Recycling Facility (MPLRF) consists of a municipal solid waste landfill with gas collection and control system; and a energy recovery system. This source is located in an attainment area for all pollutants. The Middle Peninsula Landfill and Recycling Facility is a non-hazardous municipal solid waste (MSW) landfill located on U.S. Route 17, approximately 1.5 miles north of Adner, Virginia in Gloucester County. MPLRF is owned by the County of Gloucester and operated by Waste Management Disposal Services of Virginia, Inc. (WMDSV). The facility operates under the terms of Solid Waste Permit No. 572, issued by the DEQ Waste Division on August 15, 1994. The DEQ Solid Waste Permit specifies the allowable waste types that can be received and disposed of at MPLRF. In the Solid Waste Permit no restrictions are made prohibiting the disposal of commercial and industrial waste at the MPLRF. According to AP-42 (p 2.4-4), facilities disposing of MSW, commercial, and industrial waste are considered to be co-disposal facilities. The facility is a Title V major source of non-methane organic compounds (NMOC's) as defined under the New Source Performance Standard (NSPS) 'Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills and the Landfill MACT (40 CFR 63 Subpart AAAAA). Because the facility is subject to Subpart WWW, it is required to collect and control the emission of landfill gas and is subject to Title V permitting. The MPLRF began accepting waste in June of 1995. An Initial Design Capacity Report received from WMDSV on June 6, 1996 reported the MPLRF to have a design capacity of 35.4 million cubic meters or 46.3 million cubic yards. A Gas Collection and Control System (GCCS) plan was submitted by the source on June 12, 1998. This plan was approved on August 29, 2000. The initial Title V permit was issued on January 1, 2004 and amended on February 15, 2006 and April 24, 2013. The initial [semi-]annual report was submitted on August 23, 2004. Operation of the open flare began on April 8, 1999. Operation of the enclosed flare began on November 6, 2000 (replaced on August 7, 2017 with flare (F03). Operation of the flare (F03) began on November 13, 2017. The facility currently operates under the terms of a State Major Air Permit revised August 7, 2017, which previously added eight Caterpillar landfill gas only spark ignited engine/generators and replaced the LFG enclosed flare with a new utility flare (F03) and retained utility flare (F01). Both utility flares (F01 and F03) have been tested and met the operating and emissions limitations of 40 CFR 60.18 (September 8, 2000 and March 20, 2018. This air permit action is both a significant permit modification based on the August 7, 2017 State Major permit and a Title V renewal. The application was received on October 16, 2017 and was deemed timely and administratively complete. Therefore, the Title V permit application shield is in place.

### Emission Units

Process Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
F01	F01	John Zink	182.16 mmBtu/hr, HHV, 98%	Open Flare Model ZOF, 1999	F01	NMOC	07/17/1998
F03	F03	John Zink or equal	158.84 mmBtu/hr, HHV, 98%	Open Flare	F03	NMOC	08/07/2017
SF1-SF8	SF1-SF8	Solar Flare, portable	50-160 SCFM size; <= 420 SCFM Total	(for odor control only)	SF1-SF8	NMOC	07/07/2008
EG1 – EG7	1-7	Caterpillar engine/ Generators	10.1 mmBtu/hour each (HHV) (Built 03/08/2007 – 11/20/2007)	AFRC, regulated After cooler circuit and ESP common Breather	EG1 – EG7	NMOC	07/07/2008
EG8	8	Caterpillar engine/ Generators	10.1 mmBtu/hour each (HHV) (Built 1988)	AFRC, regulated After cooler circuit and ESP common Breather	EG8	NMOC	07/07/2008
BG1	BG1	Diesel Generator (limited to 1000 hours per year)	288 HP/200 kW (Installed 8/12/1999; Built 1999)	NA	NA	NOx, CO, PM, PM-10, SO2, VOC	06/26/2006
BG2	BG2	Diesel Generator (limited to 500 hours per year)	398 HP/250 kW (Installed 11/2017; Engine Manufacture date 07/2017)**	NA	NA	NOx, CO, PM, PM-10, SO2, VOC	08/08/2017
GEN-1	GEN-1	Generator (Scale House)	5 kW (Built 2003)	NA	NA	NOx, CO, PM, PM-10, SO2, VOC	06/26/2006
GEN-2	GEN-2	Generator (Administrative Office)	5 kW (Built 2003)	NA	NA	NOx, CO, PM, PM-10, SO2, VOC	06/26/2006
LO-1 (includes GCCS-1)	NA	Landfill Operations, includes Gas Collection and Control System	46.3 million cubic yards, 3.22 billion scf LFG	See Flares above	GCCS-1	NMOC	07/17/1998
AST-25	NA	AST – Gasoline Storage Tank	275 Gallons***	NA	NA	VOC	09/01/2013

\*The Size/Rated capacity and PCD efficiency is provided for informational purposes only, and is not an applicable requirement.

\*\*Emergency generator engine is subject to the applicable requirements of 40 CFR 60 Subpart IIII.

\*\*\*Gasoline storage tank is subject to the applicable requirements of 40 CFR 63 Subpart CCCCCC.

**Fuel Burning Equipment Requirements – (Emission unit ID# FO1, FO3, BG1, BG2 and EG1 – EG8)**

1. Fuel Burning Equipment Requirements - Limitations - The permittee shall operate an active collection and control system, approved by the Administrator that captures the gas generated within the landfill. The GCCS installed at the Middle Peninsula Landfill shall be designed in accordance with 40 CFR 60.752 (b) (2) (ii) (A). The active collection system shall be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment. The system shall collect gas from each area, cell or group of cells in the landfill in which solid waste has been placed for a period of 5 years or more if active or 2 years or more if closed or at final grade. The system shall collect gas at a sufficient extraction rate. Also, the system shall be designed to minimize the off-site migration of subsurface gas. Based on the Waste Management Disposal Services of Virginia Title V application, uncontrolled NMOC emission rates are estimated as more than 50 megagrams per year (Mg/yr). Therefore, it is the responsibility of Waste Management Disposal Services of Virginia to keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.  
(9 VAC 5-80-110, 40 CFR 60.752 (b)(2)(ii) (A), 40 CFR 753 and 40 CFR 758 (d))
2. Fuel Burning Equipment Requirements - Limitations - Non-Methane Organic Compounds (NMOC) contained in the landfill gas shall be controlled by burning in multiple combustion devices. The combustion devices: an open flare (FO1), an open flare (FO3), and eight (8) Caterpillar engine/generators (EG1 – EG8) shall be provided with adequate access for inspection. The enclosed flare (FO2) to be removed prior to startup of open flare (FO3). A sufficient number of control devices shall be in operation at all times to combust the entire flow of landfill gas from the GCCS system.  
(9 VAC 5-80-110 and condition 2 of the NSR Permit dated 08/07/2017)
3. Fuel Burning Equipment Requirements - Limitations - The open flares (FO1 and FO3) shall be designed and operated in accordance with §60.18 except as noted in 40 CFR 60.754(e).  
(9 VAC 5-80-110, 40 CFR 60.752 and condition 3 of the NSR Permit dated 08/07/2017)
4. Fuel Burning Equipment Requirements - Limitations - Fugitive dust and Fugitive emission controls shall include the following, or equivalent, as approved by DEQ:
  - a. All cover material being stockpiled shall be kept adequately moist to control dust during storage and handling or covered at all times to minimize emissions as appropriate.
  - b. Dust from haul roads and traffic areas shall be controlled by the application of asphalt, water, or suitable chemicals or equivalent methods as approved by the DEQ.
  - c. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. These measures shall include paving the entrance road to the facility up to the vicinity of the process areas. Trucks leaving the site shall have clean wheels achieved by use of a wheel washer or equivalent. Dirt, product,

or raw material spilled or tracked onto paved surfaces shall be promptly removed or wetted to prevent particulate matter from becoming airborne.

(9 VAC 5-80-110 and condition 4 of the NSR Permit dated 08/07/2017)

5. Fuel Burning Equipment Requirements - Limitations - The primary purpose of the GCCS is to control the migration of methane gas. The permittee shall operate the collection system such that the surface methane concentration is less than 500 ppm above the background level at the surface of the landfill. A negative pressure shall be maintained at each active wellhead except in case of fire, increased well temperature, use of a geomembrane or synthetic cover, or at a decommissioned well. The permittee shall operate each interior, active wellhead in the collection system such that the gas temperature is less than 55 degrees Celsius and with either nitrogen level less than 20% or an oxygen level less than 5%. (9 VAC 5-80-110, 40 CFR 60.753 (b), (c) and (d))
6. Fuel Burning Equipment Requirements - Limitations - The provisions for oxygen, nitrogen, temperature, pressure and surface methane concentrations shall apply at all times except during periods of startup, shut down, or malfunction, provided that the duration of the startup, shutdown, or malfunction does not exceed 5 days for collection systems and does not exceed 1 hour for treatment or control devices. (9 VAC 5-80-110, 40 CFR 60.755 (e))
7. Fuel Burning Equipment Requirements - Limitations - The permittee shall operate the GCCS system such that all collected gas is routed to one or more control devices or a treatment system. In the event that the collection and control system is inoperable, the GCCS gas moving equipment shall be shut down and all vents to the atmosphere shall be closed within 1 hour. (9 VAC 5-80-110, 40 CFR 60.753 (e))
8. Fuel Burning Equipment Requirements - Limitations - The permittee shall operate the control or treatment systems at all times that gas is being collected by the GCCS system. Control devices include the flares (F01 and F03) and the landfill gas treatment system to the engine/generators (EG1 - EG8). (9 VAC 5-80-110 and 40 CFR 60.753 (f))
9. Fuel Burning Equipment Requirements - Limitations - The permittee shall place each well or design component as specified in the GCCS design plan and shall install wells no later than 60 days after the date on which the initial solid waste has been in place for a period of 5 years or more if active or 2 years or more if closed or at final grade. (9 VAC 5-80-110 and 40 CFR 60.755 (b))
10. Fuel Burning Equipment Requirements - Limitations - The generator (BG1) shall be used only for providing power at the location during interruption of service from the normal power supplier, periodic maintenance testing and operational training. Total use for the generator (BG1) may not exceed 1000 hours per year, calculated monthly as the sum of each consecutive 12-month period. (9 VAC 5-80-110 and condition 7 of the NSR Permit dated 08/07/2017)



11. Fuel Burning Equipment Requirements - Limitations - The throughput of landfill gas (LFG) to the LFG Engines (EG1 – EG8) and the flares (F01, F03 and/or SF1-SF8, if used) shall not exceed 2,780,000,000 (2.78 x 10<sup>9</sup>) cubic feet, dry basis, per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-110 and condition 8 of the NSR Permit dated 08/07/2017)

12. Fuel Burning Equipment Requirements - Limitations - The approved fuels for the combustion equipment are as follows:

Caterpillar engine/generators (EG1-EG8)	Treated Landfill Gas
Backup Generators (BG1 and BG2)	Diesel Fuel or No. 2 Fuel Oil (S15)
Flares (F01 and F03)	Untreated Landfill Gas

Any request to add a new fuel or a new fuel-burning device may require a permit. A pilot light on flare devices (F01, F03) is fueled with liquid petroleum gas (LPG) or untreated landfill gas. Treated Landfill Gas is the process of compression, filtration, and moisture removal for energy recovery device using requirements per 40 CFR 60.752(b)(2)(iii)(C) and approved for Middle Peninsula Landfill in US EPA letter dated April 18, 2007.  
(9 VAC 5-80-110 and condition 9 of the NSR Permit dated 08/07/2017)

13. Fuel Burning Equipment Requirements - Limitations - Except where this permit is more restrictive than the applicable requirement, the NSPS WWW applicable equipment as described in Condition 1 shall be operated in compliance with 40 CFR 60, Subpart WWW.  
(9 VAC 5-80-110 and condition 10 of the NSR Permit dated 08/07/2017)

14. Fuel Burning Equipment Requirements - Limitations - Emissions from the operation of the eight (8) Caterpillar LFG engine/generators (EG1-EG8) shall not exceed the limits specified below:

	<u>each engine</u>	<u>combined</u>	
PM	0.8 lbs/hr	26.6 tons/yr	(9 VAC 5-50-260)
PM10 (Filterable)	0.8 lbs/hr	26.6 tons/yr	(9 VAC 5-50-260)
PM2.5 (Filterable)	0.8 lbs/hr	26.6 tons/yr	(9 VAC 5-50-260)
Sulfur Dioxide	0.2 lbs/hr	5.5 tons/yr	(9 VAC 5-50-260)
Nitrogen Oxides (as NO <sub>2</sub> )	3.7 lbs/hr	128.3 tons/yr	(9 VAC 5-50-260)
Carbon Monoxide	6.8 lbs/hr	239.8 tons/yr	(9 VAC 5-50-260)
VOC	0.1 lbs/hr	1.6 tons/yr	(9 VAC 5-50-260)
NMOC	0.1 lbs/hr	4.1 tons/yr	(9 VAC 5-50-260)

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 1, 2, 11, 12, and 13.  
(9 VAC 5-80-110 and condition 12 of the NSR Permit dated 08/07/2017)

15. Fuel Burning Equipment Requirements - Limitations - Emissions from the two open flares (F01 or F03) system shall not exceed the limits specified below:

PM	3.7 lbs/hr	16.1 tons/yr	(9 VAC 5-50-260)
PM10 (Filterable)	3.7 lbs/hr	16.1 tons/yr	(9 VAC 5-50-260)
PM2.5 (Filterable)	3.7 lbs/hr	16.1 tons/yr	(9 VAC 5-50-260)
Sulfur Dioxide	2.8 lbs/hr	12.1 tons/yr	(9 VAC 5-50-260)
Nitrogen Oxides (as NO <sub>2</sub> )	12.9 lbs/hr	56.4 tons/yr	(9 VAC 5-50-260)
Carbon Monoxide	48.0 lbs/hr	210.2 tons/yr	(9 VAC 5-50-260)
VOC	0.6 lbs/hr	2.5 tons/yr	(9 VAC 5-50-260)
NMOC	1.5 lbs/hr	6.4 tons/yr	(9 VAC 5-50-260)

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 1, 2, 3, 11, 12, and 13.  
(9 VAC 5-80-110 and condition 13 of the NSR Permit dated 08/07/2017)

16. Fuel Burning Equipment Requirements - Limitations - The RICE MACT, 40 CFR 63 Subpart ZZZZ §63.6590(a)(2)(iii) for which construction commenced after June 12, 2006 identifies (EG1 – EG7) and (BG-2) as new engines. The requirements are as follows:

Citation	Requirement
63.6603(a) and Table 2d(5) and 2d (4)	Operating Limitations
63.6605	General Compliance Requirements
63.6625 (c),(e)(f)(h), (i) & (j)	Monitoring and Maintenance Requirements
63.6640	Continuous Compliance Requirements
63.6650 and Footnote 2 of Table 2d	Reporting Requirements
63.6655 (c)	Recordkeeping Requirements
63.6665 and Table 8	General Provisions

The facility shall provide notice should the engines (EG1 – EG7) and (BG-2) is replaced, modified or reconstructed and all information required by 40 CFR 63 Subpart ZZZZ to:

**R3\_APD\_Permits@epa.gov**

EG8 is identified as an existing engine, since construction was commenced before June 12, 2006. The requirements are as follows:

Citation	Requirement
63.6603(a) and Table 2b, 2d	Operating Limitations
63.6605	General Compliance Requirements
63.6625(e)(h) & (j)	Monitoring and Maintenance Requirements
63.6640	Continuous Compliance Requirements
63.6655(a)(d)(e)	Recordkeeping Requirements

Citation	Requirement
63.6665 and Table 8 (except, per 63.6645(a)(5), the following do not apply: 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), and 63.9(b)-(e), (g) and (h).	General Provisions

(9 VAC 5-80-110 and 40 CFR §§63.6590(a)(2)(iii) of 40 CFR 63 Subpart ZZZZ)

17. Fuel Burning Equipment Requirements - Limitations - The permittee shall operate in compliance with all applicable requirements of 40 CFR 63 Subpart ZZZZ as required by §§63.6590(c) requiring the permittee to comply with procedure in 40 CFR 60, Subpart IIII (BG-2) in Condition 16 and 18. No further applicable requirements to 40 CFR 63 Subpart ZZZZ applies to these SI RICE engines (EG1 – EG7) and CI RICE engine BG-2 at this time (See Note in Condition 19 below).

For the replaced CAT 3516 engine listed as EG8 (an Existing LFG RICE at Area Sources), or any other SI RICE engine that is switched out and was manufactured/commenced construction prior to June 12, 2006. The commence compliance date is October 13, 2013 and requirements of 40 CFR 63, MACT Subpart ZZZZ in Table 2d as listed, the permittee shall operate in compliance with the following applicable requirements of 40 CFR 63 Subpart ZZZZ:

1. Change oil and filter every 1,440 hours of operation or annually, whichever comes first.
2. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first.
3. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.

The Additional Requirements (Table 6), the facility shall:

Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Note: Sources have the option to utilize an oil analysis program (per § 63.6625(i)) to extend the specified oil change requirement.

(9 VAC 5-80-110, 40 CFR §§63.6590 (c) and 40 CFR Part 60, Subparts IIII and Subpart JJJJ)

18. Fuel Burning Equipment Requirements - Limitations – The permittee must be in compliance with the emission limitations and operating limits in 40 CFR 60, Subpart IIII for the emergency generator (BG-2). The NSPS IIII for stationary reciprocating internal combustion engine (RICE) used by the emergency generator requirements are as follows:

Citation	Requirement
§60.4200(e)	Temporary Engines
§60.4205(b) and §60.4202	Emissions Standards

Citation	Requirement
§60.4207(a, b and c)	Fuel Requirements
§60.4209(a and b)	Monitoring Requirements
§60.4206, §60.4211(a, c, f and g)	Compliance Requirements
§60.4212	Testing Requirements
§60.4214(b)	Notification and Reports
§60.4214(c)	Records Requirements
§60.4214 and Table 8	General Provisions

The stationary reciprocating internal combustion engine (RICE) used by the emergency generator (BG-2) can only combust non-road diesel fuel that meets the requirements of 40 CFR 80.510(b). The stationary RICE emergency generator (BG-2) shall have installed a non-resettable hour meter. Engines equipped with diesel particulate filters must have installed a backpressure monitor.

(9 VAC 5-80-110 and 40 CFR 60, Subpart IIII)

19. Fuel Burning Equipment Requirements - Limitations – The permittee must be in compliance with the emission limitations and operating limits in 40 CFR 60, NSPS Subpart JJJJ, should the facility replace any of the LFG engine generators (EG-1 - EG-8) with NSPS Subpart JJJJ applicable engine(s) during this permit term. The 40 CFR 60, NSPS Subpart JJJJ Summary of requirements are as follows:

Citation	Requirement
§60.4230	Engine Applicability
§60.4233, §60.4234 and Table 1	Emissions Standards
§60.4235 to §60.4237	Other Requirements
§60.4243	Compliance Requirements
§60.4244 and Table 2	Testing Requirements
§60.4245	Notification and Reports
§60.4246 and Table 3	General Provisions
§60.4248	Definitions

The facility upon applicability of 40 CFR 60, NSPS Subpart JJJJ, shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. The facility must also conduct an initial performance test within 1 year of applicable engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

Note: A physical change, such as a like-for-like replacement event for EG1-EG8 at the stationary source would be subject to permitting under State Regulations 9VAC5-80-50, 9 VAC5-80-1100, 9VAC5-80-1602, if the replacement engine's manufacture date changes regulatory applicability for that engine (i.e. an engine subject to 40 CFR 60 Subpart JJJJ replaces an engine not subject to 40 CFR 60 Subpart JJJJ, or an engine not subject to 40 CFR 60 Subpart JJJJ, replaces an engine subject to 40 CFR 60 Subpart JJJJ). Application for such a change must be made sixty (60) days in advance of the planned work (including 40 CFR 60 Subpart IIII and/or Subpart JJJJ). Otherwise, a like-for-like replacement with no

change in 40 CFR 60 Subpart IIII and/or 40 CFR 60 Subpart JJJJ regulatory status is subject to a fifteen (15) day letter notification before the planned switchout. In the event of an emergency replacement, the facility shall provide notification to DEQ and request the Administrator approve the reduced emergency switchout timeline. For affected engines(s), that are subject to 40 CFR 60 Subpart IIII and/or 40 CFR Subpart JJJJ, the facility shall comply with applicable notification and reporting requirements of the NSPS. (9 VAC 5-80-110 and 40 CFR 60, Subpart IIII and Subpart JJJJ)

20. Fuel Burning Equipment Requirements - Limitations - All existing emergency compression ignition (CI) stationary RICE, (including BG-1, GEN-1 and GEN-2), with a site rating of less than or equal to 500 hp shall be in compliance with 40 CFR 63, Subpart ZZZZ by May 3, 2013. These units shall comply with the following requirements, as applicable:

Citation	Requirement
§63.6603(a) and Table 2d	Operating Limitations
§63.6605	General Compliance Requirements
§63.6625(e)(f)(h) and (j)	Monitoring and Maintenance Requirements
§63.6640	Continuous Compliance Requirements
§63.6650 and Footnote 2 of Table 2d	Reporting Requirements
§63.6655 except (c) and §63.6660	Recordkeeping Requirements
§63.6665 and Table 8	General Provisions

a. Emission limitations in 40 CFR 63.6603 (Table 2d):

- i. Except during periods of startup of the engine, change oil and filter every 500 hours of operation or annually, whichever comes first;
- ii. Except during periods of startup of the engine, inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;
- iii. Except during periods of startup of the engine, inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- iv. During periods of startup of the engine, minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

b. General compliance requirements in 40 CFR 63.6605:

- i. The permittee must be in compliance with the emission limitations and operating limits in this subpart that apply at all times.
- ii. At all times the permittee must operate and maintain any affected source including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this

standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

- c. Monitoring, installation, collection, operation, and maintenance requirements in 40 CFR 63.6625(e), (f), (h\*), and (i):
  - i. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
  - ii. Install a non-resettable hour meter, if one is not already installed.
  - iii. The permittee shall have the option to utilize the oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in paragraph a. (above).
- d. Continuous compliance requirements in 40 CFR 63.6640 and reporting requirements in 40 CFR 63.6650:
  - i. Report each instance in which you did not meet each emission limitation or operating limitation in Table 2d that applies to you and report these deviations according to the requirements in 40 CFR 63.6650.
  - ii. Report each instance in which you did not meet the requirements in Table 8 that apply to you.
  - iii. Any operation other than emergency operation, maintenance, and testing, and operation in non-emergency situations for more than 50 hours per year, as permitted in these conditions, is prohibited.
  - iv. There is no time limit on the use of emergency stationary RICE in emergency situations.
  - v. The permittee may operate the emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

- vi. The permittee may operate the emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing.
  - 1. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
  - 2. In order for the emergency stationary engine to be considered an emergency stationary reciprocating internal combustion engine (RICE) under 40 CFR 63, Subpart ZZZZ, the operation of the emergency stationary RICE are limited to emergency situations as specified in 40 CFR §63.6640(f)(1); maintenance checks and readiness testing for a limited number of hours per year as specified in 40 CFR §63.6640(f)(2)(i); and certain non-emergency situations for a limited number of hours per year as specified in 40 CFR §63.6640(f)(3). If the unit is not operated in accordance with 40 CFR §63.6640(f)(1), §63.6640(f)(2)(i) or §63.6640(f)(3), the emergency stationary engine will not be considered an emergency stationary RICE under 40 CFR Part 63, Subpart ZZZZ and must meet the emissions standards and other applicable requirements for a non-emergency engines.
- vii. The permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 and June 30 of each calendar year for the preceding six-month period and noncompliance must be clearly identified.
- viii. The summary report shall also include any reporting required under 40CFR 63.6640(f), as necessary.
- e. Recordkeeping requirements in 40 CFR 63.6655 (except (c)) and 63.6660:
  - i. A copy of each notification and report that the permittee submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).
  - ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
  - iii. Records of all required maintenance performed on the air pollution control and monitoring equipment.
  - iv. Records of action taken during periods of malfunction to minimize emissions in accordance with paragraph c. (above), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

- v. Records of the maintenance conducted on the RICE pursuant to paragraph c. (above).
  - vi. Records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee shall document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the permittee shall keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.
  - vii. The permittee shall keep each record in a form suitable and readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).
- f. Requirements as specified in Footnote 1 of Table 2d: If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in condition paragraph a. (above), or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State, or local law under which the risk was deemed unacceptable.
- g. Requirements of the General Provisions listed in 40 CFR Subpart A, as applicable pursuant to Table 8 of 40 CFR 63 Subpart ZZZZ, except per 63.6645(a)(5), the following do not apply: 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), and 63.9(b)-(e), (g) and (h).
- (9 VAC 5-80-110, 40 CFR 63.6603, 63.6605, 63.6625, 63.6640, 63.6645, 63.6650, 63.6655, 63.6660 and referenced Subpart ZZZZ tables)
21. Fuel Burning Equipment Requirements - Limitations - Visible emissions from the landfill gas fuel burning equipment shall not exceed 10 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). At all times, including periods of startup, shutdown and malfunction, owners shall, to the extent practicable, maintain and operate any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Virginia Department of Environmental Quality, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspections of the source.
- (9 VAC 5-80-110 and condition 14 of the NSR Permit dated 08/07/2017)



22. Landfill Operations and GCCS Requirements - Monitoring - The GCCS shall be equipped with a continuous gas flow rate measuring device that shall record flow to, or bypass from, the landfill gas flares. The open flares (F01 and F03) shall be equipped with a heat sensing device to indicate the continuous presence of a flame. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be active whenever the associated combustion equipment is processing landfill gas.  
(9 VAC 5-80-110 and 40 CFR 60.756 and condition 5 of the NSR Permit dated 08/07/2017)
23. Fuel Burning Equipment Requirements – Monitoring - The open flares (F01 and F03) monitoring devices used to continuously measure total gas flow and flame presence shall be recorded by the permittee with a frequency of not less than once every 15 minutes. The permittee shall keep a log of the continuously recorded measurements of the gas flow rate and flame presence.  
(9 VAC 5-80-110, 40 CFR 60.756 and condition 6 of the NSR Permit dated 08/07/2017)
24. Fuel Burning Equipment Requirements – Monitoring - The permittee shall perform a daily visual evaluation, Monday through Friday, when operating, except when closed for holidays, on the engines. If such visual observation indicates any visible emissions, the permittee shall take corrective actions to eliminate the visible emissions. If such corrective action fails to eliminate visible emissions, the permittee shall conduct a visible emissions evaluation (VEE) using 40 CFR 60, Appendix A, Method 9 for six minutes. If the six minute VEE opacity average exceeds 10%, the VEE shall continue for an additional twelve minutes. If any of the six-minute averages during the 18 minutes exceeds 20% opacity, the VEE shall continue for one hour from initiation, to determine compliance with the opacity limit. The permittee shall record the details of the visual emissions observations, VEE, and any corrective actions.  
(9 VAC 5-80-110 E)
25. Fuel Burning Equipment Requirements – Monitoring - The permittee shall perform periodic visual evaluations of the flare(s) once each day, Monday through Friday, when operating, except when closed for holidays, for compliance with the opacity standards for fuel burning equipment. If such periodic evaluations indicate any visible emissions, the permittee shall take appropriate action, immediately, to return the unit to normal operation such that no visible emissions exist. If such corrective action fails to eliminate visible emissions, the permittee shall conduct a visible emissions evaluation (VEE) utilizing EPA Method 22 (reference 40 CFR, Appendix A). If a method 22 evaluation and/or corrective action becomes necessary, the permittee shall record the details of the incident in a logbook. The logbook shall be kept on site and available for inspection by the DEQ for the most recent five year period.  
(9 VAC 5-80-110 E)
26. Landfill Operations and GCCS Requirements - monitoring - As an affected source, the Middle Peninsula Landfill is categorized as an 'existing landfill' in 40 CFR Part 63, Subpart AAAA. The additional requirements beyond those in the NSPS WWW include development of the 'SSM' plan and the start of semi-annual reporting for the GCCS system (GCCS-1), beginning January 16, 2004 (and as amended by FR 20446 dated April 20, 2006).

(9 VAC 5-80-110, 40 CFR 63.6(e)(3), 40 CFR 63.1930 through 63.1990 and condition 15 of the NSR Permit dated 08/07/2017)

27. Landfill Operations and GCCS Requirements - Monitoring - The permittee shall measure gauge pressure in the header at each individual active well monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days. If a negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the system shall be expanded within 120 days of the initial measurement of positive pressure. Exceptions to this requirement are listed under 40 CFR 60.753 (b)(1)-(b)(3). If corrective actions are taken as specified in 60.755, the monitored exceedance is not a violation of the operational requirements. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.  
(9 VAC 5-80-110, 40 CFR 60.753 (g) and 40 CFR 60.755 (a)(3))
28. Landfill Operations and GCCS Requirements - Monitoring - The permittee shall monitor each active well monthly for temperature and nitrogen or oxygen. If a well exceeds one of these operating parameters (see 40 CFR 60.753(c) for parameters and higher operating values), action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. If corrective actions are taken as specified in 40 CFR 60.755, the monitored exceedance is not a violation of the operational requirements. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.  
(9 VAC 5-80-110, 40 CFR 753 (g) and 40 CFR 60.755 (a)(5))
29. Landfill Operations and GCCS Requirements - Monitoring - Surface methane monitoring shall be conducted along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals as detailed in the updated Surface Monitoring Design Plan and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. Under the Consent Order signed with EPA Region III on December 4, 2004, the facility is required to show compliance with this updated plan in future records and reports of surface monitoring.  
(9 VAC 5-80-110 and 40 CFR 60.753 (d))
30. Landfill Operations and GCCS Requirements - Monitoring - The permittee shall monitor surface concentration of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals for each collection area for which waste has been in place for two or more years if closed or at final grade or for which waste has been in place for five or more years if active. This surface methane monitoring shall take place on a quarterly basis and using an organic vapor analyzer, flame ionization detector or other portable monitor meeting the specifications provided in paragraph (d) of 40 CFR 60.755. Areas with steep slopes, the active working face or other dangerous areas have been excluded from this monitoring as approved by the Director, Piedmont Regional Office.  
(9 VAC 5-80-110 and 40 CFR 60.755 (c)(1))

31. Landfill Operations and GCCS Requirements - Monitoring – The background concentration of methane during surface emissions monitoring shall be determined for the instrument measuring the surface concentrations of methane by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells. Surface emission monitoring shall be performed in accordance with 40 CFR 60, Appendix A, Method 21, Section 8.3.1, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.  
(9 VAC 5-80-110 and 40 CFR 60.755(c)(2) through 60.755(c)(3))
32. Landfill Operations and GCCS Requirements - Monitoring – The portable analyzer used to determine the surface methane concentration shall meet the instrument specifications provided in 40 CFR 60, Appendix A, Method 21, except that methane shall replace all references to VOC. The calibration gas shall be methane, diluted to a nominal concentration of 500 ppm in air. To meet the performance evaluation requirements in Method 21, the instrument evaluation procedures in Method 21, of Appendix A shall be used. The calibration procedures in Method 21 shall be followed immediately before commencing a surface monitoring survey.  
(9 VAC 5-80-110 and 40 CFR 60.755 (d))
33. Landfill Operations and GCCS Requirements - Monitoring - Any reading of surface methane of 500 ppm or more above background at any location shall be recorded as a monitored exceedance and the actions specified below shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements.
  - a. The location of the exceedance shall be marked and recorded.
  - b. The permittee shall perform cover maintenance or make adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of the exceedance. The location shall be re-monitored within 10 calendar days of detecting the exceedance.
  - c. If the re-monitoring of the location shows a second exceedance, the permittee shall take additional corrective action and shall monitor the location again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the location, the action specified in (e) below shall be taken, and no further monitoring of that location is required until the action specified in (e) has been taken.
  - d. Any location that initially showed an exceedance but has methane concentration less than 500 ppm above background at the 10-day re-monitoring (specified in (b) or (c)) shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 ppm above background, no further monitoring of that location is required until the next quarterly monitoring. If the 1-month re-monitoring shows an exceedance, the permittee shall repeat the requirements of either paragraph (c) or (e) of this condition.
  - e. For any location where the monitored methane concentration equals or exceeds 500 ppm above background 3 times within a quarterly period, a new well or other

collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes, or control devices, and a corresponding timeline for installation may be submitted to the Director, Piedmont Regional Office.

(9 VAC 5-80-110 and 40 CFR 60.755 (c)(4)(i) through 60.755 (c)(4)(v))

34. Landfill Operations and GCCS Requirements - Monitoring - The permittee shall implement a program to monitor for cover integrity and accomplish cover repairs as necessary on a monthly basis.

(9 VAC 5-80-110 and 40 CFR 60.755 (c)(5))

35. Landfill Operations and GCCS Requirements - Monitoring - The permittee shall install a sampling port and a port for temperature measurements at each wellhead. The permittee shall measure the gauge pressure in the gas collection header on a monthly schedule. The permittee shall monitor temperature and nitrogen or oxygen concentrations in the landfill gas, at each wellhead, on a monthly schedule.

(9 VAC 5-80-110 and 40 CFR 60.756 (a))

36. Landfill Operations and GCCS Requirements - Recordkeeping - The permittee shall record and maintain a log of well inspections that indicate a positive pressure had existed and the corrective action taken to correct a measured exceedance at the wellhead. Exceptions to this requirement include; a fire or increased well temperature, use of a geo-membrane or synthetic cover, or a decommissioned well.

(9 VAC 5-80-110 and 40 CFR 60.753 (b)(1) – 753 (b)(3))

37. Landfill Operations and GCCS Requirements - Recordkeeping - The permittee shall develop and maintain a surface monitoring design plan that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals.

VAC 5-80-110 and 40 CFR 60.753 (d))

38. Landfill Operations and GCCS Requirements - Recordkeeping - The permittee shall keep for at least 5 years, current, readily accessible, on site records of the design capacity report, based on the original report, dated June 7, 1996, the current amount of waste in place, and the annual placement rates for solid waste. Offsite records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats, approved by DEQ, are acceptable.

VAC 5-80-110 and 40 CFR 60.758 (a))

39. Landfill Operations and GCCS Requirements and Fuel Burning Equipment Requirements - Recordkeeping - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:

- a. Annual total throughput of landfill gas to the LFG Engines (EG1 – EG8) and the flares (F01 and F03 and/or SF1-SF8, if used), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall

be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

- b. All GCCS and flare system (FO1 and FO2) monitoring information as required by Subpart WWW (40 CFR 60.756) as well as all appropriate data as required by 40 CFR 60.758.
- c. Operating hours for the 200 kW backup generator (BG1) and 250kW emergency generator (BG2).

All records required by this condition and Subpart WWW (40 CFR 60.758) shall be available for inspection by the DEQ and shall be current for the most recent five years.  
(9 VAC 5-80-110, 40 CFR 60.758 and condition 16 of the NSR Permit dated 08/07/2017)

- 40. Fuel Burning Equipment Requirements - Recordkeeping - The permittee shall maintain for 5 years, readily accessible complete records of the following monitoring observations:
  - a. Well head gauge pressures measured monthly.
  - b. Wellhead temperatures measured monthly.
  - c. Wellhead nitrogen or oxygen concentrations measured monthly.
  - d. Flow rate of the landfill gas to the control devices or treatment system.
  - e. Maintain information on exceedances related to the quarterly surface methane monitoring.
  - f. Malfunction reports for control or collection devices.

(9 VAC 5-80-110, 40 CFR 60.753 (c) and (d) and 40 CFR 60.758 (c))

- 41. Landfill Operations and GCCS Requirements - Recordkeeping - The permittee shall keep for the life of the collection system an up to date, readily accessible plot map showing each existing and planned collector in the system. This map shall also provide a unique identification location label for each collector. Additionally, the permittee shall maintain readily accessible records of the installation date and location of all newly installed collectors.  
(9VAC 5-80-110 and 40 CFR 60.758 (d))
- 42. Landfill Operations and GCCS Requirements - Recordkeeping - The permittee shall maintain for 5 years, readily accessible records of all collection and control system exceedances of the operational standards, including the readings taken in later months showing a return to compliance, and the location where the exceedance occurred.  
(9 VAC 5-80-110 and 40 CFR 60.758 (e))

43. Landfill Operations and GCCS Requirements and Fuel Burning Equipment Requirements - Recordkeeping - The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the landfill gas collection and control system, any malfunction of the air pollution control equipment or any periods during which a continuous monitoring system or monitoring device is inoperative for more than one hour.  
(9 VAC 5-80-110 and 40 CFR 60.758 (c)(1))
44. Fuel Burning Equipment Requirements - Recordkeeping - The permittee shall maintain records for flares (F01 and F02) and LFG engines (EG1-EG8) of the required training including a statement of time, place and nature training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the combustion equipment. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site for a five year period and made available for inspection by the DEQ.  
(9 VAC 5-80-110)
45. Fuel Burning Equipment Requirements – Testing - Initial and subsequent performance tests shall be conducted for NO<sub>x</sub> and CO from each of the LFG Caterpillar 3516 engine/generators (EG1-EG8) to determine compliance with the emission limits contained in Condition 14 (when installed). The tests shall be performed while operating on treated landfill gas only. The tests shall be performed at not less than 80% of the rated capacity of the electrical output on one engine. The tests shall be performed and demonstrate compliance within 60 days after achieving the maximum expected operating rate for the facility, but in no event later than 180 days after start-up of the complete engine installation. The subsequent performance tests required shall at a minimum be conducted once every five years on all eight LFG engines and before the operating permit renewal application for NO<sub>x</sub> and CO. The tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Piedmont Regional Office within 60 days after test completion and shall conform to the test report format enclosed with this permit.  
(9 VAC 5-80-110 and condition 17 of the NSR Permit dated 08/07/2017)
46. Fuel Burning Equipment Requirements – Testing - Concurrently with the initial and subsequent performance tests required in Condition 45, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall also be conducted by the facility on those LFG engines (EG1-EG8) tested. Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the tests are to be arranged with the Director, Piedmont Region. The facility shall submit a test protocol at least 30 days prior to testing. The evaluation shall be performed, and reported and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the engine installation. Should conditions prevent concurrent opacity observations, the Director, Piedmont Region shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests.

Two copies of the test result shall be submitted to the Director, Piedmont Region within 60 days after test completion and shall conform to the test report format enclosed with this permit.

(9 VAC 5-80-110, 9 VAC 5-50-410 and condition 18 of the NSR Permit dated 08/07/2017)

47. Landfill Operations and GCCS Requirements - Testing - If measured, the nitrogen level at each wellhead shall be determined by using Method 3C.  
(9 VAC 5-80-110 and 40 CFR 60.753 (c)(1))
48. Landfill Operations and GCCS Requirements - Testing - The Oxygen level at each wellhead shall be determined by an oxygen meter using Method 3A or 3C, except for the following:
  - a. The span shall be set so that the regulatory limit is between 20 and 50 percent of the span.
  - b. A data recorder is not required.
  - c. Only a zero and a span calibration gas are required. Ambient air may be used as span.
  - d. A calibration error check is not required.
  - e. The allowable sample bias, zero drift, and calibration drift are +/- 10%.

(9 VAC 5-80-110 and 40 CFR 60.753 (c)(2))
49. Fuel Burning Equipment Requirements – Testing – Concurrently with the visible emissions performance tests on the open flare designated F01, the actual exit velocity of the open flare shall be determined by Reference Methods 2, 2A, 2C or 2D as appropriate, by the unobstructed (free) cross sectional area of flare tip.  
(9 VAC 5-50-410, 9 VAC 5-80-110 and 40 CFR 60.18 (f)(4))
50. Fuel Burning Equipment Requirements – Testing - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.  
(9 VAC 5-80-110)
51. Fuel Burning Equipment Requirements - Reporting – The satisfactory operation of the monitoring equipment shall comply with Subpart WWW (40 CFR 60.752 and 40 CFR 60.756), including certification that manufacturer's written requirements or recommendations for installation, operation and calibration of the device have been followed.  
(9 VAC 5-80-110 and condition 19 of the NSR Permit dated 08/07/2017)
52. Landfill Operations and GCCS Requirements & Fuel Burning Equipment Requirements - Reporting – The permittee shall demonstrate compliance with operational standards for the GCCS required by Subpart WWW (40 CFR 60.753) in accordance with appropriate subsection(s) of Subpart WWW (40 CFR 60.755). The permittee shall demonstrate compliance of the GCCS requirements of Subpart WWW (40 CFR 60.752) in accordance

with appropriate subsection(s) of Subpart WWW (40 CFR 60.755). All reports required to demonstrate compliance with the compliance requirements of Subpart WWW (40 CFR 60.755) shall be prepared and submitted to the Piedmont Regional Office as required by Subpart WWW (40 CFR 60.757(f)(1) – (f)(6).  
(9 VAC 5-80-110, 40 CFR 60.753 – 60.757 and condition 20 of the NSR Permit dated 08/07/2017)

53. Landfill Operations and GCCS Requirements & Fuel Burning Equipment Requirements - Reporting – On March 1<sup>st</sup> and September 1<sup>st</sup> of each year, routine reports required by the Landfill MACT and the NSPS for the operation of the GCCS shall be submitted to the DEQ. Other non-routine reports, based on construction or operating situations are described below.

Report Name	Periods Covered	Report Due Dates	Ref. Condition Nos.	Regulation Citations
NSPS Compliance	Jan, 1 <sup>st</sup> to Jun. 30 <sup>th</sup> Jul. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	March 1 <sup>st</sup> & Sept. 1 <sup>st</sup>	10, 11 and 13.	40 CFR 60.753 to 60.757
Landfill MACT, SSM Report	Jan, 1 <sup>st</sup> to Jun. 30 <sup>th</sup> Jul. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	March 1 <sup>st</sup> & Sept. 1 <sup>st</sup>	22.	40 CFR 63.1980
Gas Well as-built On-site Update Report	Within 60 days of construction	As required by construction activity	1.	40 CFR 60.752 (b)(2)(ii)(A) and 40 CFR 758
Semi-annual Monitoring	Jan, 1 <sup>st</sup> to Jun. 30 <sup>th</sup> Jul. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	March 1 <sup>st</sup> & Sept. 1 <sup>st</sup>	22.	9 VAC 5-80-110

(9 VAC 5-80-110, 40 CFR 60.752, 40 CFR 60.753 to 40 CFR 60.757 and 40 CFR 63.1980)

54. Landfill Operations and GCCS Requirements & Fuel Burning Equipment Requirements - Reporting – The permittee shall maintain for 5 years, readily accessible complete records of the following:
- Instances when positive pressure at a wellhead occurred due to efforts to avoid a fire. If no such instances occur, the permittee shall submit a negative report.
  - Values measured, time recorded for each exceedances of pressure, temperature, nitrogen or oxygen measurements at wellheads. Exceptions exist for pressure where a geomembrane or synthetic cover is used and for decommissioned wells.
  - Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.
  - All instances when the GCCS was not operating for more than five consecutive days.
  - All instances where surface methane concentration exceeded 500 ppm; the actual concentration recorded and the location on the plot plan of that exceedance.



- f. Records of GCCS expansion, including dates, locations and equipment installed in the process of expanding the GCCS.
- g. Startup, shutdown and malfunction (SSM) plan activity reports.

(9 VAC 5-50-410, 9 VAC 5-80-110, 40 CFR 60.757, 40 CFR 60.753 and 40 CFR 63.1980)

55. Fuel Burning Equipment Requirements - Reporting – The permittee shall furnish written notification to the Director, Piedmont Regional Office of the anticipated dates of performance tests, postmarked at least 30 days prior to the date of the tests.

Copies of these written notifications shall be sent to:

**R3\_APD\_Permits@epa.gov**

(9 VAC 5-50-410, 9 VAC 5-80-110 and 40 CFR 60.7 (a))

56. Landfill Operations and GCCS Requirements - Reporting – The permittee shall submit the closure report to DEQ and the Administrator within 30 days of waste acceptance cessation.

(1) The equipment removal report shall contain all of the following items:

- (i) A copy of the closure report submitted in accordance with 40 CFR 60.757(d);
- (ii) A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and
- (iii) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.

(2) The Administrator may request such additional information as may be necessary to verify that all of the conditions for removal in 40 CFR 60.752(b)(2)(v) below have been met.

The collection and control system may be capped or removed provided that all the conditions of paragraphs 40 CFR 60.752(b)(2)(v) (A), (B), and (C) are met:

(A) The landfill shall be a closed landfill as defined in 40 CFR 60.751. A closure report shall be submitted to the Administrator as provided in 40 CFR 60.757(d);

(B) The collection and control system shall have been in operation a minimum of 15 years; and

(C) Following the procedures specified in 40 CFR 60.754(b), the calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.

DEQ may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 9 VAC 20-80-250 E & F and

40 CFR 258.60. If a closure report has been submitted to the DEQ, no additional wastes may be placed into the landfill without filing a notification of modification.  
(9 VAC 5-80-110, 9 VAC 5-50-410, 60.752(b)(2)(v), 40 CFR 60.757(d - e))

### Facility Wide Conditions

57. Facility Wide Conditions - Limitations – Total emissions from the operation of the fuel-burning equipment (LFG Engines (EG1-EG8), two Open Flares (F01, F03), 200kW generator (BG1), 250kW generator (BG2) and solar flares (SF1-SF8)) shall not exceed the limits specified below:

PM (Filterable)	32.5 tons/yr	(9 VAC 5-50-260)
PM10 (Filterable)	32.5 tons/yr	(9 VAC 5-50-260)
PM2.5 (Filterable)	32.5 tons/yr	(9 VAC 5-50-260)
Sulfur Dioxide	13.6 tons/yr	(9 VAC 5-50-260)
Nitrogen Oxides (as NO <sub>2</sub> )	168.1 tons/yr	(9 VAC 5-50-260)
Carbon Monoxide	348.0 tons/yr	(9 VAC 5-50-260)
VOC	3.7 tons/yr	9 VAC 5-50-260)
NMOC	8.5 tons/yr	(9 VAC 5-50-260)

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 1, 2, 3, 11, 12, and 13.  
(9 VAC 5-80-1180 and condition 11 of the NSR Permit dated 08/07/2017)

58. Facility Wide Conditions - Limitations – The opacity standard (visible emission standard) shall apply at all times except during periods of startup, shutdown, and malfunction and as otherwise provided in the applicable standard.  
(9 VAC 5-50-20 A and 9 VAC 5-80-110)
59. Facility Wide Conditions - Limitations - At all times, including periods of startup, shutdown and malfunction, owners shall, to the extent practicable, maintain and operate any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Virginia Department of Environmental Quality, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspections of the source.  
(9 VAC 5-50-20 E, 9 VAC 5-50-380, 9 VAC 5-20-180 A, and 9 VAC 5-80-110)
60. Facility Wide Conditions - Limitations - In case of shutdown or bypassing, or both, of air pollution control equipment for necessary scheduled maintenance which results in excess emissions for more than one hour, the intent to shut down such equipment shall be reported to the board and local air pollution control agency, if any, at least 24 hours prior to the planned shutdown. Such prior notice shall include, but is not limited to, the following:

- a. Identification of the specific facility to be taken out of service as well as its location and permit or registration number;
- b. The expected length of time that the air pollution control equipment will be out of service;
- c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period, and,
- d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage of the air pollution control equipment.

(9 VAC 5-50-380, 9 VAC 5-20-180 C and 9 VAC 5-80-110)

61. Facility Wide Conditions - Testing - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as is practicable but no later than four daytime business hours, notify the board by facsimile transmission, telephone or electronic mail of such failure or malfunction and shall within two weeks provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. The use of email is an approved method of meeting the 14 day written notification. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the board.  
(9 VAC 5-50-380, 9 VAC 5-20-180 C and 9 VAC 5-80-110)
62. Facility Wide Conditions - Testing - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.  
(9VAC5-80-110)
63. Facility Wide Gasoline Dispensing requirements – MACT Limitations – Except where this permit is more restrictive than the applicable requirement, the MACT equipment as described in Condition1 shall be operated in compliance with the requirements of 40 CFR 63, Subpart CCCCCC (when storing gasoline). The facility shall, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. The facility shall keep applicable records as specified in §63.11125(d) and §63.11126(b). Based on the monthly throughput of gasoline at the landfill facility (less than 10,000 gallons/month), the following recordkeeping and work practice standards listed in 40 CFR 63.11116 apply to the facility. The facility shall comply with the following:

Citation	Requirement
§63.11111	Am I subject to the requirements in this subpart?

§63.11113	When do I have to comply with this subpart?
§63.11115	What are my general duties to minimize emissions?
§63.11116	Requirements for facilities (monthly <10,000 gallons gasoline).
§63.11125	What are my recordkeeping requirements?
§63.11126	What are my reporting requirements?

- a. The facility must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures include, but are not limited to, the following:
  - (1) Minimize gasoline spills;
  - (2) Clean up spills as expeditiously as practicable;
  - (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
  - (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
- b. The facility is not required to submit notifications or reports as specified in §63.11125, §63.11126, or subpart A of this part, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.
- c. The facility must comply with the requirements of this subpart by the applicable dates specified in §63.11113 (January 24, 2014).
- d. Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with paragraph (a)(3) of this section.

The gasoline throughput records and applicable records as specified in §63.11125(d) and §63.11126(b) shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110, §63.11113, §63.11116 and §63.11126)

64. Insignificant Emission Units - The following emission units at the facility are identified in the application as insignificant emission units under 9VAC5-80-720:

Emission Unit No.	Emission Unit Description	Citation-	Pollutant Emitted (5-80-720 B.)	Rated Capacity (5-80-720 C.)
T1 – T8	Engine Oil Day Tanks - WMRE	5-80-720C	VOC	25 gallons
T9	Engine Oil Tank - WMRE	5-80-720C	VOC	1,500 gallons
T10	Engine Used Oil Day Tank - WMRE	5-80-720C	VOC	1,500 gallons

<b>Emission Unit No.</b>	<b>Emission Unit Description</b>	<b>Citation-</b>	<b>Pollutant Emitted (5-80-720 B.)</b>	<b>Rated Capacity (5-80-720 C.)</b>
T11	Engine Coolant Tank - WMRE	5-80-720C	VOC	750 gallons
CBV-1-8	Crankcase Breather Vents – WMRE (Hilco Mist Eliminator)	5-80-720C	PM	NA
GC1	Gas Chromatograph (in gas plant)	5-80-720C	VOC	NA
LP-1	Light Plant (Almand) Landfill or Shop	5-80-720C	NOx, CO, VOC, SOx, PM, HAPs	6 Kw
LP-2	Light Plant (Coleman) Landfill or Shop	5-80-720C	NOx, CO, VOC, SOx, PM, HAPs	20 Kw
AST1	Above Ground Diesel Fuel Storage Tank - Mobile	5-80-720.C	VOC/HAPs	2,600 gallons
AST2	Used Oil Tank – Convenience Center	5-80-720.C	VOC/HAPs	550 gallons
AST3	Hydraulic Fluid Storage Tank	5-80-720.C	VOC/HAPs	500 gallons
AST4	Used Oil Tank	5-80-720.C	VOC/HAPs	500 gallons
AST5	Transmission Fluid Storage Tank	5-80-720.C	VOC/HAPs	250 gallons
AST6	Motor Oil Tank	5-80-720.C	VOC/HAPs	500 gallons
AST7	Transmission Fluid Storage Tank	5-80-720.C	VOC/HAPs	250 gallons
LT-8	Leachate Storage Tank	5-80-720.C	VOC/HAPs	500,000 gallons
LT-9	Leachate Storage Tank	5-80-720.C	VOC/HAPs	500,000 gallons
AST-14	Leachate Storage Tank	5-80-720.C	VOC/HAPs	11,000 gallons
AST-15	AST containing septic waste	5-80-720.C	N/A	25,000 gallons
AST-22	AST containing propane	5-80-720.C	VOC/HAPs	1,000 gallons
AST-23	Diesel Fuel Storage Tank – Split Tank	5-80-720.C	VOC/HAPs	12,000 gallons
AST-24	AST containing propane	5-80-720.C	VOC/HAPs	120 gallons

<b>Emission Unit No.</b>	<b>Emission Unit Description</b>	<b>Citation-</b>	<b>Pollutant Emitted (5-80-720 B.)</b>	<b>Rated Capacity (5-80-720 C.)</b>
AST-26	Diesel Fuel Storage Tank for BG-2	5-80-720.C	VOC/HAPs	660 gallons
AST-27	Diesel Fuel Storage Tank for GEN-1	5-80-720.C	VOC/HAPs	5 gallons
AST-28	Diesel Fuel Storage Tank for GEN-2	5-80-720.C	VOC/HAPs	5 gallons
WELD-1	Welding Equipment (Mobile Truck)	5-80-720.C	PM	8 Kw
Liquifix-1	Liquid Stabilization Tank	5-80-720.C	PM/VOC/HAPs	13,644 gallons
Liquifix-2	Liquid Stabilization Tank	5-80-720.C	PM/VOC/HAPs	13,644 gallons
PW-1 *	Parts Washer with Lid (Closed)	5-80-720.C	VOC/HAPs	20 gallons

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9VAC5-80-110. (9VAC 5-80-110 and Condition 1 of the NSR Permit dated 08/07/2017)

65. Permit Shield & Inapplicable Requirements - Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

<b>Citation</b>	<b>Title of Citation</b>	<b>Description of Applicability</b>
9 VAC 5-40-5800 and 40 CFR 60 subpart Cc	Emission Standards and Emission Guidelines for Sanitary Landfills	These regulations only apply to municipal solid waste landfills, which commenced construction, reconstruction or modification before May 30 1991.
40 CFR 60 subpart Kb	Volatile Organic Liquid Storage Vessels	The leachate storage tanks have a vapor pressure below the 40 CFR 60 Subpart Kb thresholds. NSPS Subpart Kb does not apply based on the size of the all other listed tanks and from recordkeeping requirements as revised on October 13, 2003.
40 CFR 64	Compliance Assurance Monitoring	The Landfill is subject to an NSPS that was proposed after 11/15/1990. Therefore, this regulation does not apply. Compliance Assurance Monitoring, 40 CFR Part 64, does not apply to the facility SI RICE do <u>not</u> have add-on pollution control devices.
40 CFR 75	Acid Rain Regulations	This landfill does not have a "Qualifying Facility."
40 CFR Parts 51, 52, 70 and 71	Title V Greenhouse Gas Tailoring Rule,	Title V Greenhouse Gas Tailoring Rule, 40 CFR Parts 51,52,70 and 71, does not apply to the facility as it is an existing source not subject to PSD for any pollutant (until any increase in CO in the future).

Citation	Title of Citation	Description of Applicability
MACT Subpart A - 40 CFR Part 63.6(d), 63.6(e), 63.6(h), 63.7(e)(1), 63.8(a)(4), 63.8(c)(5), 63.9(d), 63.10(b)(2)(i)-(v), 63.10(d)(3), 63.1(e)(2)(ii), 63.10(e)(4), and 63.11	General Provisions	Facility is exempted by complying with MACT Subpart ZZZZ requirements.
9 VAC 5-40-20 A.4	startup, shut down, and malfunction opacity exclusion	The startup, shut down, and malfunction opacity exclusion listed in 9 VAC 5-40-20 A.4 cannot be included in any Title V permit. This portion of the regulation is not part of the federally approved state implementation plan. The opacity standard applies to existing sources at all times including startup, shutdown, and malfunction. Opacity exceedances during malfunction can be affirmatively defended provided all requirements of the affirmative defense section of this permit are met. Opacity exceedances during startup and shut down will be reviewed with enforcement discretion using the requirements of 9 VAC 5-40-20 E, which state that "At all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions."
Existing Source Rule 4-8 (9 VAC 5- 40-880)	Emission Standards for Fuel Burning Equipment	"E. The provisions of this article do not apply to stationary internal combustion engines."

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.  
(9VAC5-80-110 and 9VAC5-80-140)

## General Conditions

66. General Conditions - Federal Enforceability - All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.  
(9VAC5-80-110)
67. General Conditions - Permit Expiration –
- a. This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9VAC5-80-80, the right of the facility to operate shall be terminated upon permit expiration.
  - b. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
  - c. If an applicant submits a timely and complete application for an initial permit or renewal under 9VAC5-80-80 F, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9VAC5 Chapter 80, until the Board takes final action on the application under 9VAC5-80-150.
  - d. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9VAC5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9VAC5 Chapter 80.
  - e. If an applicant submits a timely and complete application under section 9VAC5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9VAC5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
  - f. The protection under subsections F 1 and F 5 (ii) of section 9VAC5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9VAC5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.
- (9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)
68. General Conditions -Recordkeeping and Reporting - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
- a. The date, place as defined in the permit, and time of sampling or measurements;



- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of such analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

(9VAC5-80-110)

69. General Conditions -Recordkeeping and Reporting - Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.  
(9VAC5-80-110)

70. General Conditions -Recordkeeping and Reporting - The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC5-80-430 G, and shall include:

- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31; and
- b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
  - i. Exceedances of emissions limitations or operational restrictions;
  - ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring or periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
  - iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9VAC5-80-110)

71. General Conditions - Annual Compliance Certification - Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later

than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to § 114(a)(3) and § 504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9VAC5-80-430 G, and shall include:

- a. The time period included in the certification. The time period to be addressed is January 1 to December 31;
- b. The identification of each term or condition of the permit that is the basis of the certification;
- c. The compliance status;
- d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;
- e. Consistent with subsection 9VAC5-80-490 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;
- f. Such other facts as the permit may require to determine the compliance status of the source; and
- g. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3\_APD\_Permits@epa.gov

(9VAC5-80-110)

72. General Conditions - Permit Deviation Reporting - The permittee shall notify the Piedmont Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to Condition 67 of this permit.  
(9VAC5-80-110 F. 2)
73. General Conditions - Failure/Malfunction Reporting - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall no later than four daytime business hours after the malfunction is discovered, notify the Piedmont Regional Office such failure or malfunction and within 14 days provide a written statement giving all pertinent

facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9VAC5-40-50 C and 9VAC5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9VAC5-40-40 and 9VAC5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Piedmont Regional Office.  
(9VAC5-80-110 and 9VAC5-20-180)

74. General Conditions - Severability - The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.  
(9VAC5-80-110)
75. General Conditions - Duty to Comply - The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.  
(9VAC5-80-110)
76. General Conditions - Need to Halt or Reduce Activity not a Defense - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.  
(9VAC5-80-110)
77. General Conditions - Permit Modification - A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9VAC5-80-50, 9VAC5-80-1100, 9VAC5-80-1605, or 9VAC5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.  
(9VAC80-110, 9VAC5-80-190 and 9VAC5-80-260)
78. General Conditions - Property Rights - The permit does not convey any property rights of any sort, or any exclusive privilege.  
(9VAC5-80-110)
79. General Conditions - Duty to Submit Information - The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.  
(9VAC5-80-110)

80. General Conditions - Duty to Submit Information - Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9VAC5-80-80 G. (9VAC5-80-110)
81. General Conditions - Duty to Pay Permit Fees - The owner of any source for which a permit under 9VAC5-80-50 through 9VAC5-80-300 was issued shall pay permit fees consistent with the requirements of 9VAC5-80-310 through 9VAC5-80-350 in addition to an annual permit maintenance fee consistent with the requirements of 9VAC5-80-2310 through 9VAC5-80-2350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by DEQ. The amount of the annual permit maintenance fee shall be the largest applicable base permit maintenance fee amount from Table 8-11 A in 9VAC5-80-2340, adjusted annually by the change in the Consumer Price Index. (9VAC5-80-110, 9VAC5-80-340 and 9VAC5-80-2340)
82. General Conditions - Fugitive Dust Emission Standards - During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:
- a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
  - b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
  - c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;
  - d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
  - e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
- (9VAC5-80-110 and [9VAC5-40-90 or 9VAC5-50-90])
83. General Conditions - Startup, Shutdown, and Malfunction - At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing

emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.  
(9VAC5-80-110 and [9VAC5-50-20 E or 9VAC5-40-20 E])

84. General Conditions - Alternative Operating Scenarios - Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9VAC5 Chapter 80, Article 1.  
(9VAC5-80-110)

85. General Conditions - Inspection and Entry Requirements - The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:
- a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
  - b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
  - d. Sample or monitor at reasonable times' substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9VAC5-80-110)

86. General Conditions - Reopening for Cause - The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9VAC5-80-80 F. The conditions for reopening a permit are as follows:
- a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

- b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9VAC5-80-110 D.

(9VAC5-80-110)

87. General Conditions - Permit Availability - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.  
(9VAC5-80-110 and 9VAC5-80-150)

88. General Conditions - Transfer of Permits

- a. No person shall transfer a permit from one location to another, unless authorized under 9VAC5-80-130, or from one piece of equipment to another.
- b. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9VAC5-80-200.
- c. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9VAC5-80-200.

(9VAC5-80-110 and 9VAC5-80-160)

89. General Conditions - Permit Revocation or Termination for Cause - A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9VAC5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.  
(9VAC5-80-110, 9VAC5-80-190 C and 9VAC5-80-260)

90. General Conditions - Duty to Supplement or Correct Application - Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the

source after the date a complete application was filed but prior to release of a draft permit.

(9VAC5-80-110 and 9VAC5-80-80 E)

91. General Conditions - Stratospheric Ozone Protection - If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.  
(9VAC5-80-110 and 40 CFR Part 82)
92. General Conditions - Asbestos Requirements - The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).  
(9VAC5-60-70 and 9VAC5-80-110)
93. General Conditions - Accidental Release Prevention - If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.  
(9VAC5-80-110 and 40 CFR Part 68)
94. General Conditions - Changes to Permits for Emissions Trading - No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.  
(9VAC5-80-110)
95. General Conditions - Emissions Trading - Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:
  - a. All terms and conditions required under 9VAC5-80-110, except subsection N, shall be included to determine compliance.
  - b. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
  - c. The owner shall meet all applicable requirements including the requirements of 9VAC5-80-50 through 9VAC5-80-300.

(9VAC5-80-110)

### **State-Only Enforceable Requirements**

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9VAC5-80-290 concerning review of proposed limits by EPA and draft permits by affected states.

96. State-Only Enforceable Requirements - Odor Management Plan - The Odor Management and Control Plan describing the practices and technology that will be used to minimize off-site odors and to address odor complaints that may occur shall be an enforceable part of this permit. The plan shall incorporate the use of best available odor control technology that is appropriate for this landfill. The plan shall also describe procedures that will be implemented in response to citizen odor complaints or the detection of significant off-site odors by DEQ staff, including progressive steps that will be taken to reduce odors. A log of all odor complaints received and actions taken shall be kept and made available for inspection by authorized Federal, State or Local officials. The Odor Management and Control Plan shall be reviewed annually by the Facility and evaluated for the need and feasibility of new or modified odor control technology or practices. Results of the annual plan review, a modified plan (Both optional submittals) and a copy of the log shall be submitted to the Piedmont Regional Office by the first day of March of each year. (9 VAC 5-80-110 and condition 31 of the NSR Permit dated 08/07/2017)